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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,653	06/27/2001	Daniel Dedu-Constantin	MS146953.1	6973
27195 7590 12/26/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER CHEN, TE Y	
			ART UNIT 2161	PAPER NUMBER
			NOTIFICATION DATE 12/26/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

09/894,653

Applicant(s)

DEDU-CONSTANTIN ET AL.

Examiner

Susan Y. Chen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,8,10,27 and 30-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,10,27 and 30-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Oct. 31, 2007 has been entered.

This office action is in response to the amendment filed on October 31, 2007.

Claims 1-2, 8, 10, 27 and 30-35 are pending for examination, claims 1-2, 8, 10, 27 and 30-35 have been amended.

***Claim Objections***

Claims 1-2, 8, 10, 27 and 30-35 are objected to because of the following informalities:

As to claims 1 and 8, these claims recite "the system stored on computer storage medium" or "A system stored on computer storage medium" in their preamble, however, the body of these claims did not contain any hardware device, hence, the claimed system merely represented as functional processing.

As to claims 27, 34 and 35, these claims recite a data accessing utility in the preamble, however, there is nothing in the claimed body refer back to the claimed access utility, thus, the claimed access utility will have no patentable weight.

As to claim 35, what is it meant by "the hierarchical model representation is an unstructured data model" (i.e., the hierarchical model is deemed to have a tree structure representation, why and how it is an unstructured data model?)

As to claims 2, 10 and 30-33, these claims have the same defects as their base claims respectively, thereby, are object for the same reason.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 34 and 35, are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As to claims 34 and 35, the claimed "computer readable media" includes transmission data signals or carrier waves, since forms of energy, the signals and waves are not a matter, composition of matter or product; and do not fall within any one of categories of patentable subject matter. Thus, it renders these claims as non-statutory.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2, 8, 10, 27 and 30-35 have been considered but are moot in view of the new ground(s) of rejection.

The examiner disagrees with applicant's piece-meal interpretation / arguments that "Holder et al. is silent regarding storing both a hierarchical model representation and a relational model representation of information in a data source and further coordinating the two representations such that changes made to one representation are reflected in the other representation as recited by the subject claims."

In response to the above arguments, the examiner directs applicant's attention to the resource-specific dynamic data modeling, accessing and synchronizing techniques disclosed by Holder and Lection as discussed below under the 35 U.S.C. 103(a) rejection. Wherein, the combined system of Holder and Lection clearly disclosed the claimed features. Thus, based on the following discussion, because applicant does not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections, as such, the rejections are maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 8, 10, 27 and 30-35, are rejected under 35 U.S.C. 103(a) as being unpatentable over Holder et al. (U.S. Patent No. 2002/0019824, hereinafter referred as Holder) in view of Lektion et al. (U.S. Patent No. 6,418,446, hereinafter referred as Lektion).

As to claim 1, Holder discloses a system for accessing data as claimed by applicant [e.g., Abstract], comprising:

a) a parser that retrieves and parses information associated with a data source [e.g., the parser at Sections: 0014-0016, 0021];

b) a data document component that receives a portion of the parsed information a hierarchical model representation of the portion of the parsed information associated with the data source [e.g., Sections: 0012-0018];

c) a data set component that receives the portion of the parsed information. [e.g., the use of XML schema parsers, editors tool at section 0016, Fig. 3-4 and associated texts];

d) the data set component and the data document component coordinate to enable access to the portion of the parsed information in either representation [e.g., the mapping function performed by the generic processor at Section: 0038, the generic read/update operations performed by the generic processor at Section: 0039] such that changes to the portion of the parsed information performed via the representation accessed are synchronized to the other representation [e.g., the use of a generic schema to synchronizing data changes at Section: 0022].

Holder did not specifically detail that the data document component stores a hierarchical model representation of the portion of the parsed information associated with the data source.

However, Lektion disclosed the details of the data document component which stores a hierarchical model representation of the portion of the parsed information associated with the data source [e.g., Abstract, col. 3, lines 8-12, col. 10, lines 23-53].

Holder and Lektion are both in the same endeavor to facilitate the access of network data document via data set schema, hence, with the teachings of Holder and Lektion in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to combine the teachings of Lektion into Holder's invention, because by doing so, the combined invention will provide the details of the data document component which stores a hierarchical model representation of the portion of the parsed information associated with the data source, such that it will be use as building blocks for subsequent document navigation without to reinvent the wheel, thereby, result in facilitating the various network data access.

As to claim 2, in addition to the limitations recited in claim 1, the combined invention of Holder and Lektion further discloses that the source data including at least one of relational database document [e.g., Holder: the use of XML schema technique at section: 0022, the use of XML Association tag technique at Sections:0034-0035, claim 5; Lektion: col. 1, lines 11-25].

As to claim 8, Holder discloses a system facilitating access to data as claimed by applicant [Abstract], comprising:

an XML data document component has a hierarchical model representation of data in an XML source document [e.g., Holder: Abstract, the units: the XML tree of Fig. 1 and associated texts, Sections: 0015-0016]; and

a data set component that stores a relational representation of at least some of the information associated with the XML source document [e.g., the group.xml & the registry.xml schema specifications at Sections 0062-0064];

the XML data document component facilitates access to the hierarchical model representations of the data and propagates changes to the data via the hierarchical model to the relational model presentations of the data set component according to a mapping between the XML data document component and the data set component [e.g., the use of data typing, Java Class plugging and XML tagging techniques in the data modeling schema at Fig. 1, Sections: 0010-0018, Sections: 0036-0038].



Holder did not specifically detail that the data document component stores a hierarchical model representation of the portion of the parsed information associated with the data source.

However, Lektion et al. (hereinafter referred as Lektion) disclosed the details of the data document component which stores a hierarchical model representation of the portion of the parsed information associated with the data source [e.g., Abstract, col. 3, lines 8-12, col. 10, lines 23-53].

Holder and Lektion are both in the same endeavor to facilitate the access of network data document via data set schema, hence, with the teachings of Holder and Lektion in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to combine the teachings of Lektion into Holder's invention, because by doing so, the combined invention will provide the details of the data document component which stores a hierarchical model representation of the portion of the parsed information associated with the data source, such that it will be use as building blocks for subsequent document navigation without to reinvent the wheel, thereby, result in facilitating the various network data access.

As to claim 10, in addition to the limitations recited in claim 8, the combined invention of Holder and Lektion further discloses that the system having an XML parser configured to retrieve information from the XML source document, and to send the information to the XML data document component and data set component [e.g., Holder Section: 0021, 0076, Fig. 4 and associated texts].

As to claim 27, this claim recites the same limitations as claim 8, in form of computer storage medium, hence is rejected for the same rational.

As to claim 30, in addition to the limitations recited in claim 1, the combined invention of Holder and Lektion further discloses that the data set component having a structural inference component configured to infer a relational structure of the data source [e.g., Section: 0050].

As to claim 31, in addition to the limitations recited in claim 1, the combined invention of Holder and Lektion further discloses that the data set component having a schema component configured to receive a schema describing a relational structure of the data source [e.g., Section: 0024-0025, 0034].

As to claim 32, in addition to the limitations recited in claim 10, the combined invention of Holder and Lektion further discloses a structural inference component configured to infer a relational structure of the XML source document [Sections: 0050].

As to claim 33, in addition to the limitations recited in claim 10, the combined invention of Holder and Lektion further discloses the data set component having a schema component configured to receive a schema describing a relational structure of the data source [e.g., Sections: 0021-0022, 0034].

As to claims 34-35, these claims recite the same features as claim 1 in form of computer executable media product/system, hence, are rejected for the same reason.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hoffberg (U.S. Patent No. 6,850,252) which discloses a Intelligent electronic appliance system and method for manipulating XML and XMI data files.

### ***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mofiz Apu can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Susan Y Chen  
Examiner  
Art Unit 2161



December 13, 2007